AGRICULTURAL BULLETIN

PUBLISHED IN THE INTERESTS OF REAL ESTATE ANALYST SUBSCRIBERS BY

ROY WENZLICK & CO.

Real Estate Economists, Appraisers and Counselors

APRIL 14 1947

Volume XVI | Number 16

TRENDS IN AGRICULTURE

WITHIN the past few weeks some of the material from the 1945 Census of Agriculture has become available on the agricultural situation. In this report we have endeavored to present as much material as is now available from the Census, the Department of Agriculture or other sources which can be used to furnish a general perspective on the problem of agricultural values. No attempt has been made to build up a complete picture of the farm outlook, as much of the material necessary for such a picture is not yet available. The intention is rather to present to those of our clients interested in the farm real estate market certain long-term trends that should have a place in their thinking. To postpone this report until all of the material is available would withhold much valuable material at a time when it might be considered of value.

Because of the inflation threat and far higher prices for agricultural products, farm lands have advanced sharply in price since 1941. Many persons are assuming that these increases will continue in much the same fashion as they developed during the period from 1915 to 1920. We are inclined to believe that the recent spurt in wheat, corn and pork prices, while of a somewhat artificial nature, will last long enough to hold 1947 farm incomes near the 1946 level. Everyone knows that food prices are too high and that they will come down. When and by how much is anyone's guess. So long as farm products are high-priced, farm income will stay up and the value of farm lands will remain high.

Our feeling is that although the high price future is uncertain as to duration, it has hit its peak. For this reason we feel that farm land values have reached their peak and after an undetermined leveling-off period will start down. We believe that the drop in farm values will not be as precipitous as that which took place following the last farm boom, but even if farm values did repeat their last plunge, the farmers should not experience such calamitous times as they did in the early 30's. Interest rates are lower than in 1919-1920, taxes are lower than they were in the early 30's, and farmers own much more substantial equities in their land. These 3 factors, linked with the farmer's increasing cash reserve, should keep most of them out of serious difficulty.

PERCENTAGE OF LAND IN FARMS ①

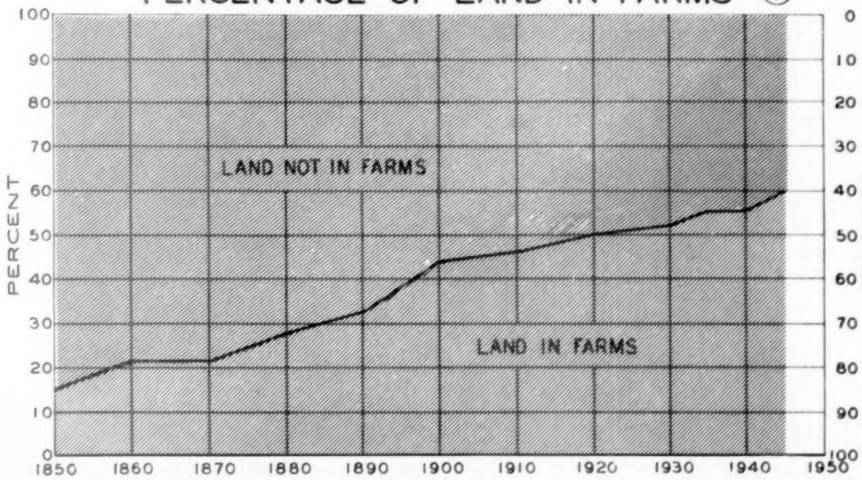
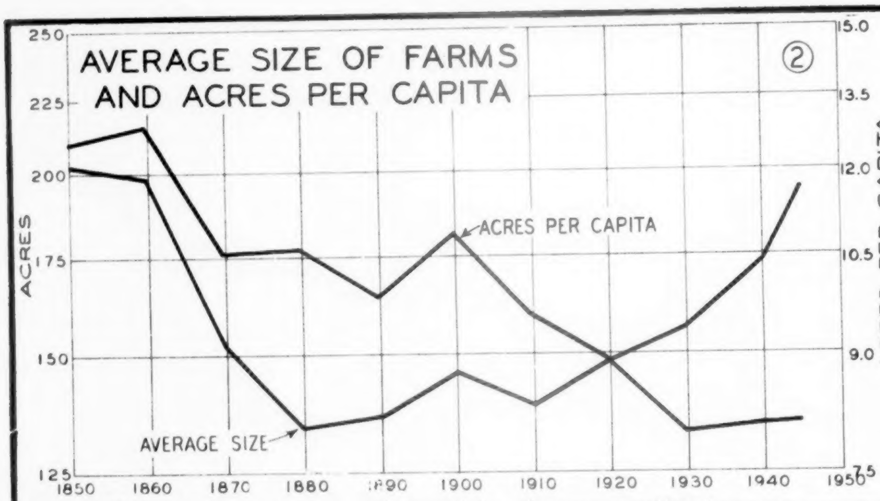


Chart 1 shows the trend in



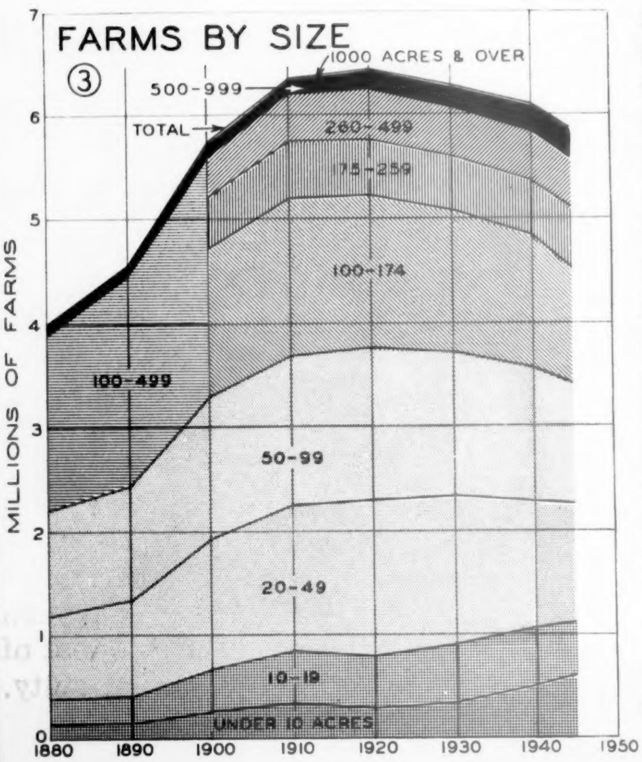
the conversion of the total area of the U. S. into farms. In 1850 only 15.6 per cent of the land was in farms; by 1940 the percentage had risen to 55.7. Over this period of 90 years each succeeding census, with the exception of the Census of 1870, showed a larger percentage of land under cultivation. The 1945 figure is 59.9 per cent in farms.

The percentage of land in farms will increase more slowly when farm prices fall off due to the fact that some marginal land now in cultivation will not produce a profit with lowered prices.

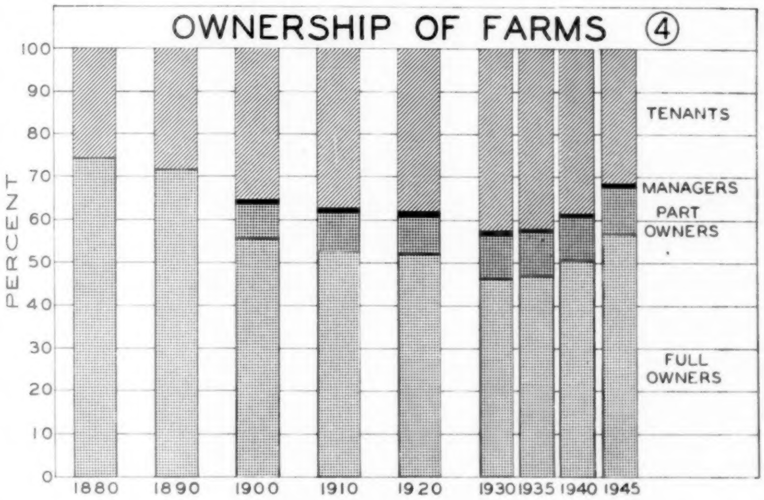
The blue line on Chart 2 shows the fluctuations in the average size of farms in acres; and the red line, the fluctuations in the average number of acres per capita of the entire population.

It is our opinion that farms will continue to increase in their average size because of the greater use of labor-saving machinery, making it possible to cultivate a large area with a smaller labor force. Every farmer will attempt to maximize his income by increasing his expenditures for labor and material until the law of diminishing returns makes it unprofitable.

Chart 3 shows the number of farms of any given size in each census enumeration from 1880 to 1945. The intermediate sized farms decreased in number and the very large farms increased, indicating that the average family-size farm in many cases has been consolidated with adjoining farms, probably because of the greater efficiency with which large farms can be operated with present mechanized equipment. It will be noticed that from 1930 to 1940 farms under ten acres in size increased sharply. A large part of this rise is due to the unemployment that existed in cities during the early thirties and encouraged the farming of marginal lands in small tracts by unemployed persons attempting to eke out a bare existence. The increase in ten-acre farms from 1940 to 1945 is accounted for by the fact that the census of 1945 included many small places not previously counted as farms.



We believe that the family-size farms will decrease in number and that the large farms will increase in number, particular-



ly in those sections of the country suited to mechanized farming.

Chart 4 shows the ownership of farms in the United States from 1880 to 1945. In the early period almost 3/4 of the farmers were full owners of their own farms, while in 1945, 56.3 per cent were full owners of their farms. The phrase "part owner" indicates the farmer who owns a portion of the farm and rents additional acreage. The decrease in tenants since 1930 has largely taken place in the cotton areas of the South through a reduction in the number of sharecroppers who have probably become farm laborers.

In the immediate future the percentage of full owners will increase as many farm tenants and laborers have migrated to cities. Over a period of ten years or more, however, we believe that the percentage of full owners will decrease.

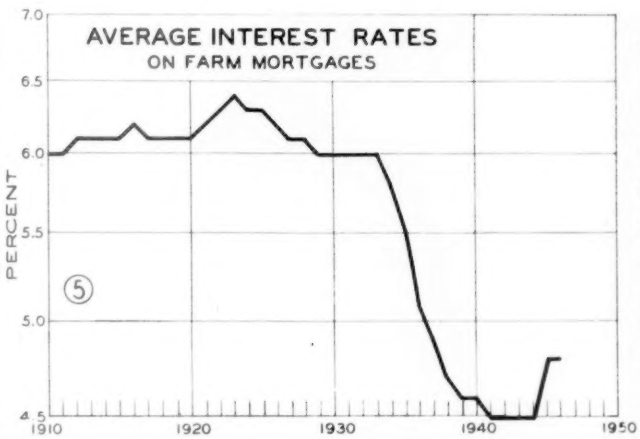
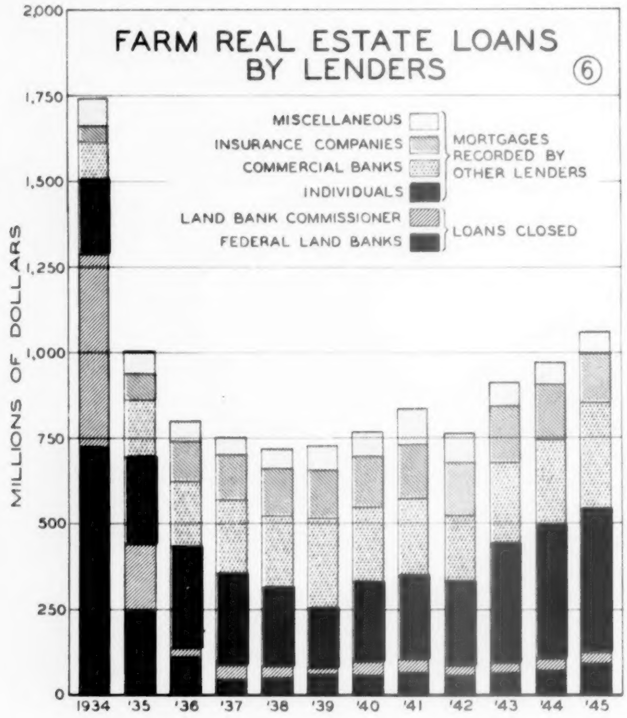


Chart 5 shows the average interest rates on farm mortgages from 1910 to 1946. The Agricultural Bulletin of August 1945 gave this same material by States. A study of the State figures will show a great narrowing of the spread in interest rates in different States since 1910. In 1910 the rate in Arizona was 9.7 per cent, while the rate in New Hampshire was 5.1 per cent. The rate in Arizona was 90 per cent higher than the rate in New Hampshire. In 1944 the highest rate was 5.5 per cent in Arkansas and the lowest was 4.0 per cent in South Dakota. The Arkansas rate was only 38 per cent higher than that of South Dakota.

The drastic drop in farm interest rates is over and further movements will continue to be sideways and upward.

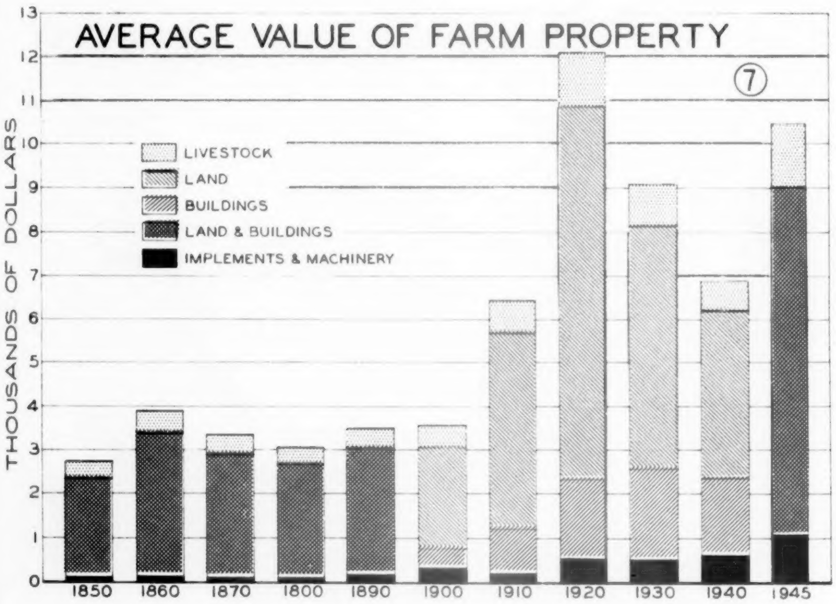
Chart 6 shows farm real estate loans made by type of lender from 1934 to 1945. While the great percentage of loans in 1934 were made by either the Land Bank Commissioner or the Federal Land Banks, in recent years individuals, commercial banks and insurance companies have again been back in the lending field. The large increase in the volume of loans is a natural result of the brisk activity in farm sales. Federal Land Bank loans showed a big increase over 1940. About 10 per cent of this increase was lent to veterans. Loans by individuals and commercial banks showed the largest gain, while insurance company loans remained about the same.



The dollar volume of loans by non-government sources has about reached its peak. Following the decline in farm values, the number of government loans can be expected to increase.

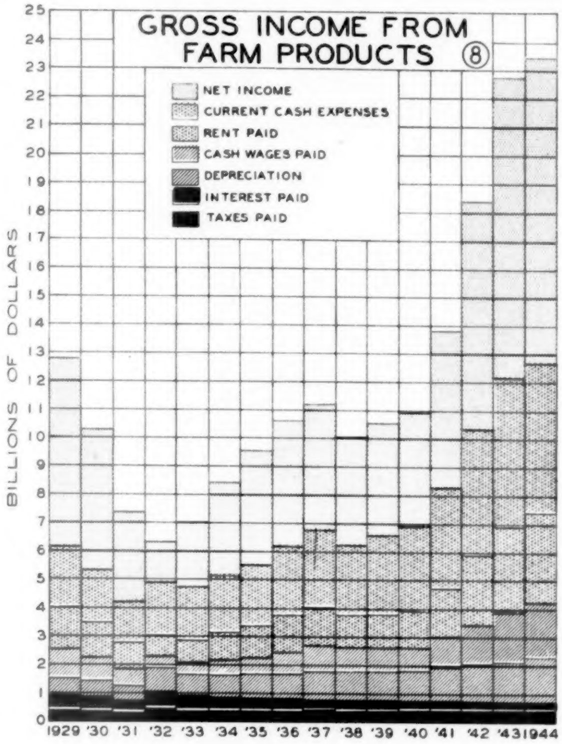
Chart 7 shows quite strikingly the large increase in the average value of farm property since 1940. The large rise in the average value of farm property since 1940 springs from two sources. The average value per acre of farm land increased 49 per cent from 1940 to 1945 and the size of the average farm increased from 174 acres to 194.8 acres. The natural shrinkage in value from 1920 to 1940 has been accentuated by the inclusion of many subsistence farms, mostly of 10 acres or less. The trend indicated in chart number 3, that farms are becoming larger and more mechanized, is further substantiated by the large increase in the value of mechanized equipment from 1940 to 1945.

The average price of farm properties has just about reached its peak. Mechanization should continue to increase for the next three or four years and if this leads to the continued growth in the average size of farms, the price of the average farm will not decline as rapidly as the average value per acre.



Value of livestock, which reached a new peak in 1945, will undoubtedly show another increase when the 1946 figures are available. This increase will probably continue for the year 1947.

Chart 8, on page 131, shows the distribution of the gross income from farm products. The portion of each bar which is stippled in blue shows the amount of net income remaining after the expenses of operation have been paid. The latest figures available showing the breakdown of farm expenses deducted from gross income are for 1944. It will be noticed that in 1932 the net income figure was approximately 36 per cent and in 1944 it was 46 per cent.

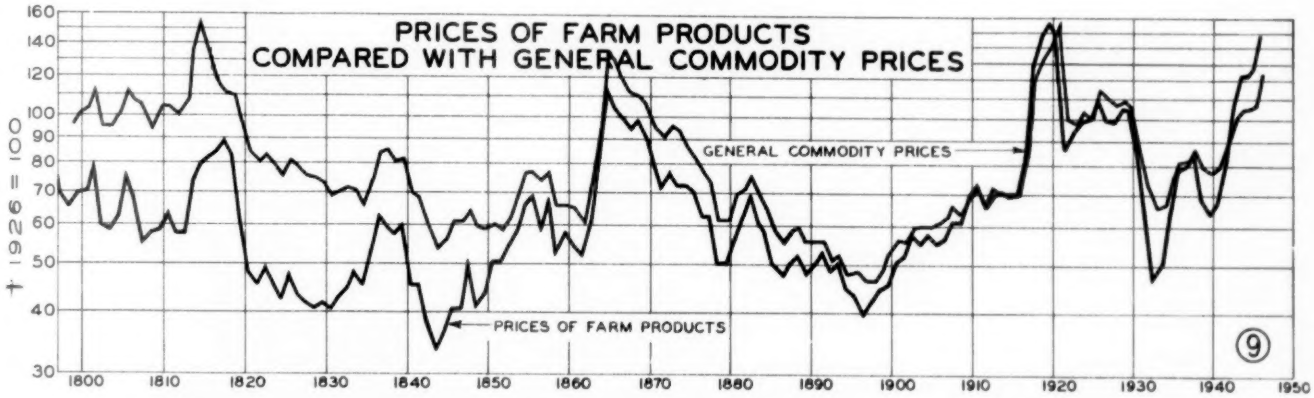


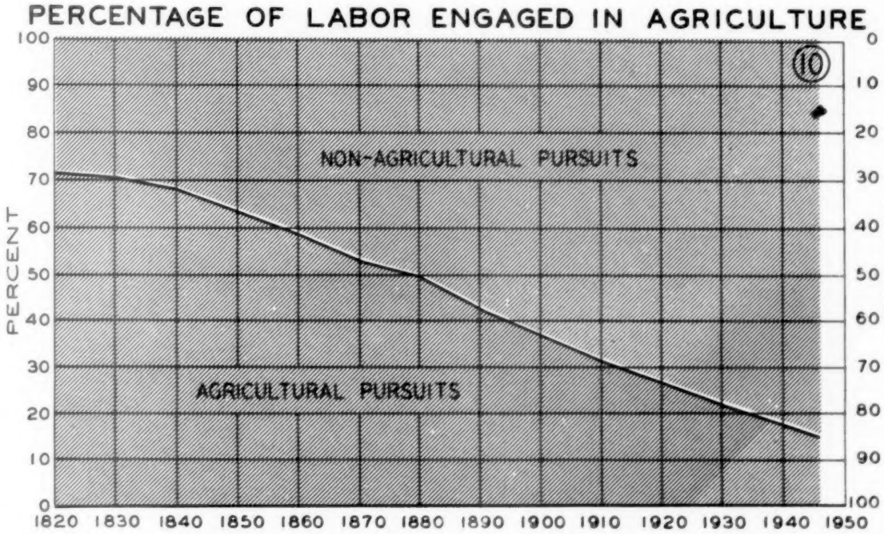
Indications from preliminary figures are that 1946 gross income will run as high as $28,000,000,000.

Gross farm income for 1947 will probably be somewhere around the 1946 level, maybe a little over or under. The gross income for 1948 should, however, begin to reflect the expected drop in the price of farm products.

Chart 9 shows the prices of farm products compared with general commodity prices from 1797 to 1946.

The prices of farm products will continue to gain in comparison with general commodity prices. This trend has been true over the entire history of the United States.





As will be noted on Chart 10, each succeeding census (without an exception) has shown a larger percentage employed in cities, a smaller percentage employed on farms, and since 1910 not only the percentage but the number of agricultural workers has been declining.

We expect a gradual leveling off in the decline of the percentage of persons engaged in agriculture. While this decline has been uninterrupted since 1820, there is an irreducible minimum of people necessary to grow food. We expect this line to level off somewhere around 10 per cent.

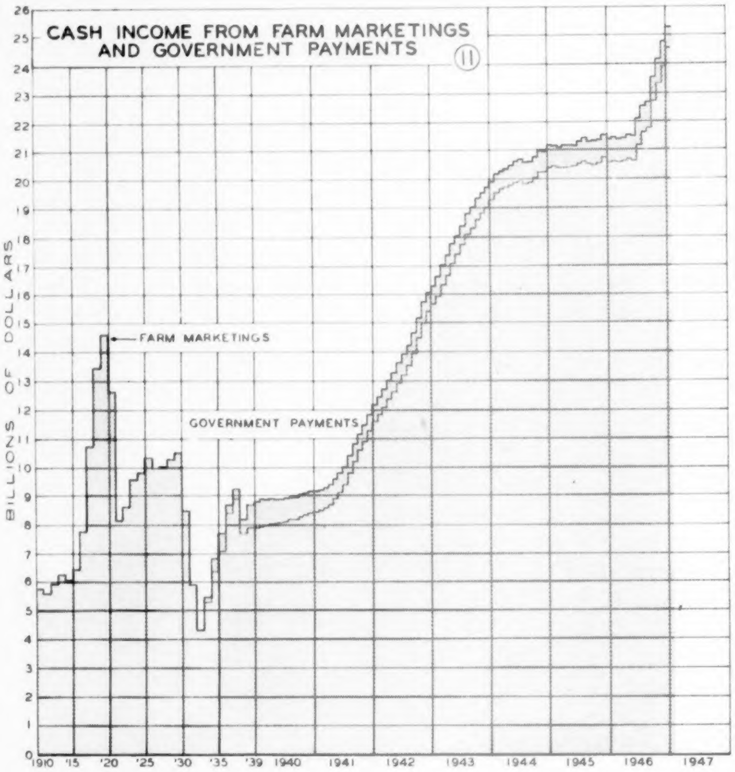


Chart 11 shows the cash income from farm marketings and from government payments. The period through 1939 is shown by years; the years from 1940 on are shown by months. The preceding peak in cash income came in 1919. The actual price peak occurred in the early months of 1920; the rapid drops that came later in the year reduced the average for 1920 below that of the preceding year. Government payments have been made since 1933.

Cash income from farm marketings should remain high during 1947 but will probably begin to slide in 1948.

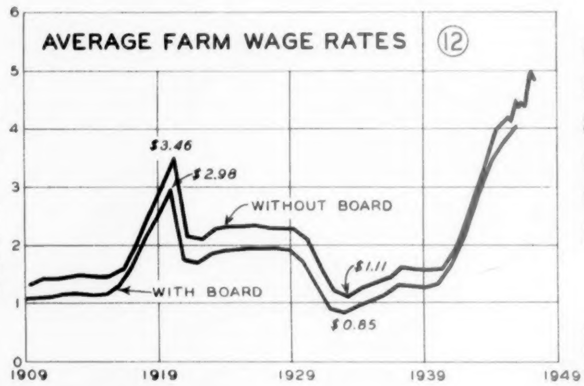
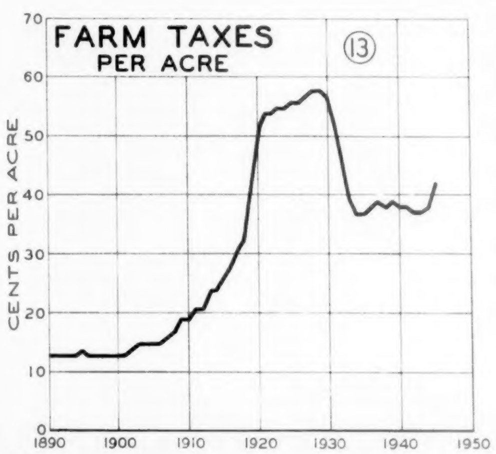


Chart 12 shows average farm wage rates. The competition of the city with its large industrial plants has caused rapid migrations from small towns and rural communities. War and postwar demand for agricultural products and the reduction in the supply of farm labor have been responsible for this rise.

We expect farm wage rates to begin to level off toward the end of the year, and when the price of farm products starts down, wage rates will follow.

Chart 13 shows farm taxes per acre from 1890 through 1945. Farm taxes rose quite rapidly during the period of the agricultural inflation of the last war and continued upward slowly during the boom of the twenties, in spite of the fact that the price of agricultural products and the values of agricultural lands were dropping rapidly. In 1933 in the U. S. farms on the average were selling for more than 20 per cent below their 1910 levels, while real estate taxes on farms were almost double. During World War II many State and local activities and services were limited by shortages of manpower and materials. This accounts in part for the lagging tax increase during the war years.



We expect the State and municipal governments to step up their expenditures to make up

for time lost during the war, and that this will cause farm real estate taxes to rise for some time.

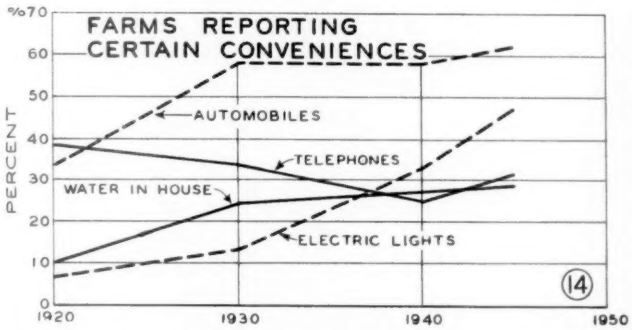


Chart 14 shows the percentage of farms which in the census enumerations of 1920, 1930, 1940 and 1945 reported certain conveniences. The use of automobiles increased rapidly from 1920 to 1930, with relatively little change from 1930 to 1940. The use of electric current also showed a rapid increase, particularly from 1930 to 1940 as a result, to some extent, of the rural electrification program. Due to the fact that the 1945 census classified many small establishments as "farms" which had heretofore not been included, and that most of these small farms are located near urban districts, the increase on the chart in the conveniences during the war years has been higher than would be expected.

These conveniences should continue to increase as long as farm income remains high.

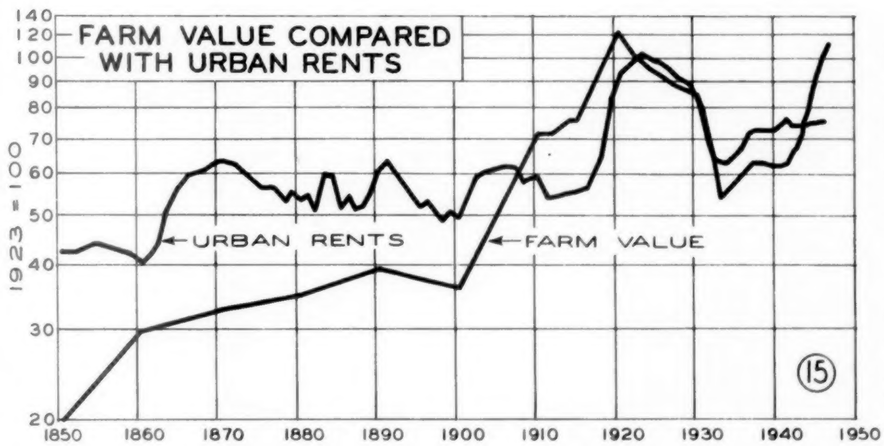


Chart 15 gives a long view of the trends in farm values per acre in comparison with urban values as shown by the rents of city residential properties.

The most striking thing on the chart is the pronounced upward trend of the farm value line from 1850 to 1920, interrupted only once in 1900. The value figures from 1850 to 1910 are taken from the Federal census figures and are available only at ten-year intervals. This chart would indicate that the inflation of farm values started around 1900, fourteen years or more before the beginning of the First World War, and that only a little more than a third of it occurred during the war or in the period immediately following.

We believe that farm values will not go quite so high this time as they did in 1920. One reason for this is the fact that modern transportation has made many fertile agricultural areas easily accessible to markets.